



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,465	04/11/2001	Curtis Lee Carrender	E-1800	3312
36977	7590	01/12/2005	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVENUE, SUITE 6300 SEATTLE, WA 98104-7092			SHIMIZU, MATSUUCHIRO	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/833,465	CARRENDER ET AL.	
	Examiner Matsuichiro Shimizu	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 15 October 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 22-25 and 27-35 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 22-25 and 27-35 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

***Response to Amendment***

The examiner withdraws rejection of claim 22 under 35 U.S.C. 112, first paragraph in view of correction filed on 10/15/04.

The examiner acknowledges canceled claims 1–21 and 26, and currently amended claims 22 and 30.

***Response to Arguments***

Applicant's arguments filed on 10/15/04 have been fully considered and examiners response is provided as follows:

Regarding applicant's argument (lines 6–12, page 6), Crye teaches, in the art of RFID technology, the receiver circuit comprising a receiving antenna that at least a portion of which comprises the operable object (Fig. 1, portion of antenna or coil 210 is magazine control module 182 associated with operable object), and Valiulis teaches, in the art of RFID technology, returning a modulated radio frequency signal by continuous-wave backscatter (Fig. 7, col. 14, lines 50–63, RFID device 65 communicates with the interrogator via backscattering). Furthermore, Heinrich, Valiulis and Crye are combinable to teach limitations cited in claim 22 in view of common prior arts of RFID tags.

Regarding applicant's argument (lines 20–25, page 6), Heinrich teaches the receiver circuit is configured to render the receiver circuit and the object permanently inoperable in response to the disable signal (Fig. 9, col. 7, lines 26–57, disable RFID device upon sale, and thereafter RFID device will not respond to reader passing through the zone covered by the reader suggesting permanent disabling). Furthermore, Heinrich and Crye are combinable to teach limitations cited in claim 23 in view of common prior arts of RFID tags.

Therefore, rejection of claims 22–25 and 27–35 follows:

*Claim Rejections – 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22–25 and 27–35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinrich et al. (5,874,902) in view of Valiulis (6,317,028) and Crye et al. (6,412,207).

Regarding claim 22, Heinrich teaches a radio frequency identification (RFID) device (Fig. 1, RFID device comprising RFID tag 120 and external circuit 130), comprising: interrogator circuit and a receiver circuit configured to receive a radio-frequency interrogation signal (col. 3, lines 4–45, col. 7, lines 26–57; return to reader 910 or interrogator, RF tag 120 receives interrogation signal) via antenna (Fig. 1, antenna 110) and to return a tag ID (Fig. 9, col. 7, lines 26–

57, return to reader 910), and a control circuit further configured to receive a disable signal and to process the disable signal to render the RFID device inoperable (col. 7, lines 26–57, disable signal to the external electronic circuitry 130 or 970); and rendering the RFID device permanently inoperable (Fig. 9, col. 7, lines 26–57, disable RFID device upon sale and RFID device will not respond to reader passing through the zone of reader). But Heinrich does not teach a modulated radio frequency signal by continuous-wave backscatter and the receiver circuit; and the receiver circuit comprising a receiving antenna that at least a portion of which comprises the operable object.

However, Valiulis teaches, in the art of RFID technology, returning a modulated radio frequency signal by continuous-wave backscatter (Fig. 7, col. 14, lines 50–63, RFID device 65 communicates with the interrogator via backscattering) for purpose of tracking manufactured product number. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to include returning a modulated radio frequency signal by continuous-wave backscatter in the device of Heinrich because Heinrich suggest returning a tag ID and Valiulis teaches returning a modulated radio frequency signal by continuous-wave backscatter for purpose of tracking manufactured product number.

Likewise, Crye teaches, in the art of RFID technology, the receiver circuit comprising a receiving antenna that at least a portion of which comprises the operable object (Fig. 1, portion of antenna or coil 210 is magazine control module 182 associated with operable object) for purpose of providing wireless control signal reception. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to include the receiver

circuit comprising a receiving antenna that at least a portion of which comprises the operable object in the device of Heinrich because Heinrich suggest antenna connected to transceiver and Crye teaches the receiver circuit comprising a receiving antenna that at least a portion of which comprises the operable object for purpose of providing wireless control signal reception.

Regarding claim 23, Heinrich teaches the device of claim 22, wherein the receiver circuit is configured to render the receiver circuit and the object permanently inoperable in response to the disable signal (Fig. 9, col. 7, lines 26–57, disable RFID device upon sale, and thereafter RFID device will not respond to reader passing through the zone covered by the reader suggesting permanent disabling).

Regarding claims 24, Crye teaches, in the art of RFID control, data regarding the operational status of the object (col. 14, lines 22–45, status in internal data acquisition system 216 or external data acquisition system 360 associated with the object or weapon).

Regarding claim 25, Heinrich teaches the device of claim 22, wherein the receiver circuit is configured to enable operation of the object in response to an enable signal from the remote RFID interrogator (col. 9, lines 20–40, operable enable signals (col. 9, line 49)).

Regarding claim 27, Crye teaches, in the art of RFID control, the device of claim 22, wherein the receiving antenna is formed entirely from the operable object (fig. 1, antenna or coil 210 in the safety magazine 100 within the weapon).

Regarding claim 28, Valiulis teaches, in the art of RFID technology, the device of claim 22, wherein the receiver circuit comprises a passive circuit that

is powered by the interrogation signals from the interrogator (Fig. 7, col. 14, lines 50–63, interrogator energizes the RFID, and RFID device 65 communicates with the interrogator via backscattering).

Regarding claim 29, Heinrich teaches the device of claim 22, where the receiver circuit is battery-powered (col. 3, lines 62–66, optional battery 211).

All subject matters except the RFID formed internal to the weapon in claims 30–31 are disclosed in claim 22. However, Crye teaches, in the art of remote control, the weapon control (col. 9, lines 29–43, remote firearm 10 control as interrogator) in response to ring identification (col. 9, line 58 to col. 10, line 20, ring is a radio frequency transponder 86 or RFID) for the purpose of providing safe operation. Furthermore, one skilled in the art recognizes RFID internal to weapon and RFID internal to ring provide same safety function, and therefore exchanging the role of transponder function from RFID internal to ring to RFID internal to weapon results in same operational function. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to include RFID internal to weapon in the device of Heinrich in view of Valiulis and Ichiyoshi because Heinrich in view of Valiulis and Ichiyoshi suggest RFID associated with appliance and one skilled in the art recognizes RFID internal to weapon for the purpose of providing safe operation. Therefore rejection of the subject matters expressed in claims 30–31 are met by references and associated arguments applied to rejection of claim 22 and argument provided in previous paragraph.

All subject matters in claim 32 are disclosed in claim 23, and therefore rejection of the subject matters expressed in claim 32 are met by references and associated arguments applied to rejection of claim 23.

All subject matters in claim 33 are disclosed in claim 25, and therefore rejection of the subject matters expressed in claim 33 are met by references and associated arguments applied to rejection of claim 25.

All subject matters in claim 34 are disclosed in claim 22 and 24, and therefore rejection of the subject matters expressed in claim 34 are met by references and associated arguments applied to rejection of claim 22 and 24.

Regarding claim 35, Valiulis in view of Cyre teaches, in the art of RFID technology, the system of claim 31, wherein the RFID device is battery powered (Cyre-col. 9, lines 17–25, battery) and is configured to transmit signals to the interrogator (Valiulis–Figs. 7–8, backscattering signal to interrogator).

#### *Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matuichiro Shimizu whose telephone number is 571-272-3066. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-8576).

Matuichiro Shimizu

January 10, 2005

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

